AMENDMENTS TO THE CLAIMS

1-24. (Canceled)

25. (Currently Amended) A method for managing a defective area of a recording medium having a data area, a lead-in area and a lead-out area, the method comprising:

detecting a defective unit during reproducing or recording operation;

recording the data of the defective unit in a replacement unit; and

recording defect management information in a defect management area,

wherein the defect management area includes a first part and a second part, the first part is used to record therein defect management information generated during a recording operation and the second part is used to record therein defect management information generated during a reproducing operation, ~~and~~

wherein the defect management information generated during the recording operation includes position information of a defective unit and a corresponding replacement unit, and the defect management information generated during the reproducing operation includes position information of a defective unit and a corresponding replacement unit, and

wherein the method further comprises recording a first access pointer and a second access pointer in the defect management area, the first access pointer indicating a position of the defect management information recorded in the first part and the second access pointer indicating a position of the defect management information recorded in the second part.

26. (Canceled)

27. (Previously Presented) The method as claimed in claim 26, wherein the first and the second parts of the defect management area are assigned in the lead-in area respectively.

28. (Previously Presented) The method as claimed in claim 27, wherein the replacement unit is included in a spare area, and the spare area is assigned in the data area.

29. (Canceled)

30. (Canceled)

31. (Currently Amended) A method for managing a defective are of a recording medium having a data area, a lead-in area and a lead-out area, the method comprising:

detecting a defective unit during reproducing or recording operation;

recording the data of the defective unit in a replacement unit;

recording a defect entry in a defect management area, the defect entry including locator information indicating positions of the defective unit and the replacement unit; and

recording an access pointer in the defect management area, the access pointer indicating position of defect management information including the defect entry,

wherein the defect management area includes a first part and a second part, the first part is used to record therein defect management information generated during a recording operation and the second part is used to record therein defect management information generated during a reproducing operation, ~~and~~

wherein the defect management information generated during the recording operation includes position information of a defective unit and a corresponding replacement unit, and the defect management information generated during the reproducing operation includes position information of a defective unit and a corresponding replacement unit, and

wherein the method further comprises recording a first access pointer and a second access pointer in the defect management area, the first access pointer indicating a position of the defect management information recorded in the first part and the second access pointer indicating a position of the defect management information recorded in the second part.

32. (Previously Presented) The method as claimed in claim 31, wherein the first and the second parts are assigned in the lead-in area respectively.

33. (Canceled)

34. (Previously Presented) The method as claimed in claim 31, wherein the replacement unit is included in a spare area, and the spare area is assigned in the data area.

35. (Canceled)

36. (Currently Amended) A recording medium comprising:

a data area including a spare area, the spare area including a replacement area;

a lead-in area; and

a defect management area, the defect management area including a first part and a second part,

wherein the first part is used to record therein defect management information generated during a recording operation, and the second part is used to record therein defect management information generated during a reproducing operation, ~~and~~

wherein the defect management information generated during the recording operation includes position information of a defective unit and a corresponding replacement unit, and the defect management information generated during the reproducing operation includes position information of a defective unit and a corresponding replacement unit, and

wherein the defect management area is configured to store therein a first access pointer and a second access pointer, the first access pointer indicating a position of the defect management information recorded in the first part and the second access pointer indicating a position of the defect management information recorded in the second part.

37. (Previously Presented) The recording medium as claimed in claim 36, wherein the second part of the defect management area is assigned in the lead-in area, and the first part and the second part of the defect management area are assigned separately.

38. (Previously Presented) The recording medium as claimed in claim 36, wherein the second part of the defect management area is assigned in the data area, and the second part of the defect management area includes at least one sub defect management area.

39. (Canceled)

40. (Canceled)

41. (Currently Amended) A method for managing a defective unit of a recording medium having a data area, a lead-in area and a lead-out area, the method comprising:

detecting a defective unit during reproducing or recording operation;

recording the data of the defective unit in a spare area; and

recording defect management information in a defect management area, the defect management area including a first part and a second part, the time for using the first part being different from the time for using the second part,

wherein the first part is used to record therein defect management information generated during a recording operation, and the second part is used to record therein defect management information generated during a reproducing operation, ~~and~~

wherein the defect management information generated during the recording operation includes position information of a defective unit and a corresponding replacement unit, and the defect management information generated during the reproducing operation includes position information of a defective unit and a corresponding replacement unit, and

wherein the method further comprises recording a first access pointer and a second access pointer in the defect management area, the first access pointer indicating a position of the defect management information recorded in the first part and the second access pointer indicating a position of the defect management information recorded in the second part.

42. (Previously presented) The method as claimed in claim 41, wherein the first part and the second part of the defect management area are assigned in the lead-in area separately.

43. (Previously presented) The method as claimed in claim 41, wherein the first part of the defect management area is assigned in the lead-in area and the second part of the defect management area is assigned in the spare area.

44. (Currently Amended) A recording medium comprising:

a data area including a spare area, the spare area including a replacement area;

a lead-in area; and

a defect management area, the defect management area including a first part and a second part, the time for using the first part being different from the time for using the second part,

wherein the first part is used to record therein defect management information generated during a recording operation, and the second part is used to record therein defect management information generated during a reproducing operation, ~~and~~

wherein the defect management information generated during the recording operation includes position information of a defective unit and a corresponding replacement unit, and the defect management information generated during the reproducing operation includes position information of a defective unit and a corresponding replacement unit, and

wherein the defect management area is configured to store therein a first access pointer and a second access pointer, the first access pointer indicating a position of the defect management information recorded in the first part and the second access pointer indicating a position of the defect management information recorded in the second part.

45. (Previously presented) The method as claimed in claim 44, wherein the first part and the second part of the defect management area are assigned in the lead-in area separately.

46. (Previously presented) The method as claimed in claim 44, wherein the first part of the defect management area is assigned in the lead-in area and the second part of the defect management area is assigned in the spare area.

47. (Previously presented) The method as claimed in claim 25, wherein the first and second parts are assigned in the data area.

48. (Previously presented) The method as claimed in claim 31, wherein the first and second parts are assigned in the data area.

49. (Previously presented) The recording medium as claimed in claim 36, wherein the first and second parts are assigned in the data area.

50. (Previously presented) The method as claimed in claim 41, wherein the first and second parts are assigned in the data area.

51. (Previously presented) The recording medium as claimed in claim 44, wherein the first and second parts are assigned in the data area.

52. (New) An apparatus for managing a defective area of a recording medium having a data area, a lead-in area and a lead-out area, the apparatus comprising:

a pick up unit being configured to read/record data from/on the recording medium; and

a controller, operatively coupled to the pick up unit, being configured to detect a defective unit during reproducing or recording operation, and the controller further configured to control the pick up unit to record the data of the defective unit in a replacement unit and record defect management information in a defect management area,

wherein the defect management area includes a first part and a second part, the first part is used to record therein defect management information generated during a recording operation and the second part is used to record therein defect management information generated during a reproducing operation,

wherein the defect management information generated during the recording operation includes position information of a defective unit and a corresponding replacement unit, and the

defect management information generated during the reproducing operation includes position information of a defective unit and a corresponding replacement unit, and

wherein said controller is further configured to control the pick up unit to record a first access pointer and a second access pointer in the defect management area, the first access pointer indicating a position of the defect management information recorded in the first part and the second access pointer indicating a position of the defect management information recorded in the second part.

53. (New) The apparatus as claimed in claim 52, wherein the first and the second parts of the defect management area are assigned in the lead-in area respectively.

54. (New) The apparatus as claimed in claim 52, wherein the replacement unit is included in a spare area, and the spare area is assigned in the data area.

55. (New) The apparatus as claimed in claim 52, wherein the first and second parts are assigned in the data area.